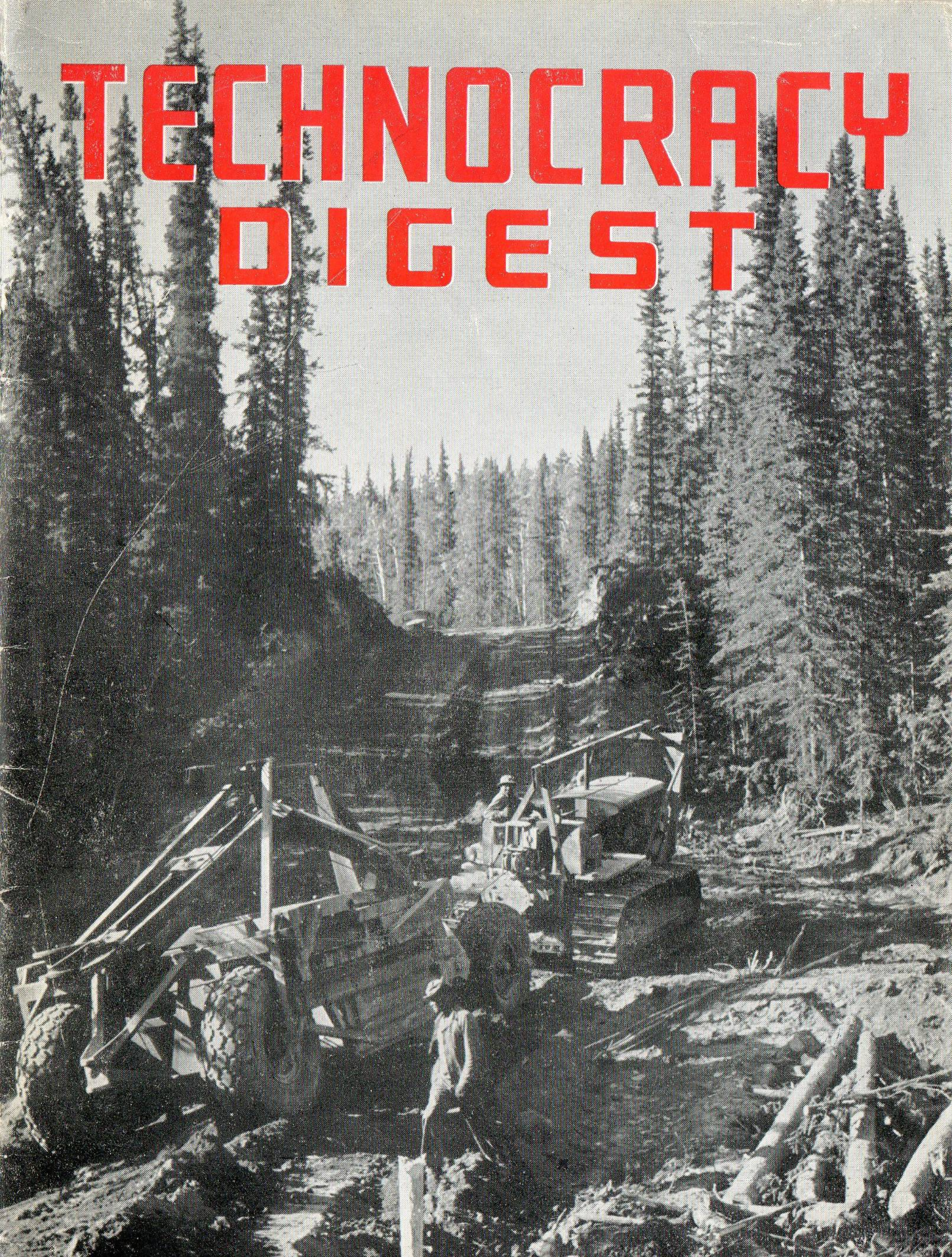
TECHNOCRACY DIGEST



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TECHNOCRACY DIGEST

THE ONLY MAGAZINE IN CANADA THAT IS PREPARING THE PEOPLE OF THIS COUNTRY FOR SOCIAL CHANGE

JULY, 1944 **VANCOUVER, B. C.** **NO. 73**

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CONTENTS

Editorial **3**
Le Bloc Populaire—Fascism in Canada **4**
Radium-Radio Receiver* **11**
Research Bulletin **19**
Technology Will Write the Peace! **35**
'Which Kind of Revolution?' **41**
The Permanent War—or 'Homo the Sap' **46**

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***When RADIO-CRAFT magazine published the article 'Radium-Radio Receiver' which is reprinted in this issue of TECHNOCRACY DIGEST, it was flooded with correspondence asking for more information. Before any of our readers write off in hot haste and pester the editor of RADIO-CRAFT still further, we suggest that they read right to the end of this article, paying particular attention to the last two words (in capital letters) and noting the month of publication. The filler material on page 18 was a box enclosure taken from the same source.**

Fascism at Home

IN this issue we present an analysis of Le Bloc Populaire—fascism in Canada—by Continental Headquarters of Technocracy Inc. **While we have been fighting fascism abroad it has been sneaking in the back door at home.**

To those who have failed to recognize the fascist nature of this Quebec separatist movement, this CHQ release may come as a surprise and a shock. The casual reader of newspaper accounts of Bloc activities, due to the usual style of press reporting, has seen nothing deeper than the noisy, trouble-making aspect of this movement, and this release sharply defines the actual implications overlooked by the average person.

The press of Canada has been too naive or too courteous when dealing with Le Bloc Populaire. (The nearest approach to an accusation of Bloc fascist tendencies that we have seen in the daily newspapers was a statement by columnist James Dyer in the **Vancouver Sun** that: '. . . . Those who will may smell the taint of fascism here.')

One strong reaction to this release has been: 'Where do the Technocrats get all their information?' The answer, of course, is that the information has always been available to anyone capable of analyzing it.

Another reaction was: 'Technocracy sure doesn't pull any punches!' We never have and never will. We have everything to lose and nothing to gain in compromising with any group that blocks the highway to our technological destiny.

Technocracy stands unalterably opposed both to foreign fascist movements in Canada disguised as home products and to any movement in Canada, whether in Quebec or elsewhere, which advocates secession in any form whatsoever or its equivalent preliminary; namely, the advocacy of greater provincial rights in order to limit the sovereignty of the national government. Any movement in Canada proposing either secession or the elevation of provinces to sovereign powers is paving a highway to national anarchy. And it is guilty of Continental treason!

Let the chips fall where they may. **—The Editor**

Le Bloc Populaire - Fascism in Canada

IN August 1942 the Province of Quebec, out of its habitant culture of human toil, hand-tools, and thrift, gave birth to a new political party founded on the fascist basis of race, religion, and an economic structure of so-called 'professional organizations.' This party is the Bloc Populaire. It is openly against the war, it is anti-British, and its policy would lead toward the secession of Quebec as a separate nation on the North American Continent. The program of the Bloc Populaire reveals that it would attempt to establish on this Continent an economic medievalism of the Holy Roman Empire. That such a party with its anti-conscription, anti-war, anti-British, anti-progressive program has been left to operate without hindrance for nearly two years while other organizations giving full support to the war have been banned is proof of the power of clerical fascism in Quebec and the extent of its infiltration into the political control of the rest of the Dominion.

Today, it is estimated that this party controls one-third of the Quebec vote, and it is reaching out to place candidates in other parts of the Dominion.

Although this is seemingly an exclusively Canadian affair, what happens in Quebec is of interest to every resident of this Continent, and Technocracy, with its joint Canadian-United States membership, is concerned with political developments which may affect Canada and have repercussions extending into the United States. The Honorable W. D. Herridge, prominent Canadian and former Canadian minister to Washington stated: '. . . the day may come when something unbelievable will happen. The United States may have to intervene in Canada . . . . Washington cannot afford to have another France in North America.'

Also of vital concern to all residents of North America is the economic and strategic significance of the Province of Quebec. It is a vast and strategically located 'empire.' It is rich in minerals; it has the lion's share of Canada's waterpower; it has tremendous timber resources; it has fine agricultural lands. Strategically, Quebec straddles the mighty St. Lawrence River, gateway to half the Continent; it looms over the industrial area of United States and the neighboring Province of Ontario. Few of us have any concept of its area. Quebec is equal in size to the New England States, plus New York, Pennsylvania, Ohio, Indiana, New Jersey, Maryland, Delaware, Virginia, West Virginia, Kentucky, Tennessee, North Carolina, and South Carolina. Most of the people are engaged in agriculture, trade, and small manufacturing, but despite this Quebec has some of the largest industrial installations in Canada and has a large share of the country's industrial output.

Within the next year there will likely be an election in Canada which, in combination with the election in the United States, will result in considerable national indecision and turmoil in both countries. The Bloc Populaire is another flame under the political pot in Canada which Technocracy has described in recent releases. In the matter of votes the Bloc Populaire is to Quebec what the C.C.F. is to the rest of Canada. Between them and the old-line political parties, the next election will produce a confusion worse-confounded. Both the C.C.F. and the Bloc are founded on a deep-seated social discontent. The C.C.F. pretends toward leftist reform; the Bloc is based on extreme racial nationalism with an ultra-conservative economic policy designed to alleviate some of the grosser abuses and substitute a paternalistic, authoritarian control within the province. On a Dominion-wide basis one situation for which the Bloc is possibly jockeying is a split in power between the three major parties with the Bloc holding the balance of power and exerting great influence in Dominion politics.

The Bloc Populaire was founded by Maxime Raymond, a Member of Parliament, now seriously ill and unable to take an active part in its program. Some slight shuffling and loss may occur before new leadership is selected, but the Bloc is such a 'natural' to the Quebec setup that it is not likely to suffer much in the long run. A co-founder is Rene Chaloult of Quebec, who for years has been agitating for the 'economic independence' of French Canadians. Chaloult was once accused in the House of Commons at Ottawa of 'sowing the seeds of bloodshed and revolution in this country.' It is suggested, however, that the new leader may be one Edouard Lacroix, a millionaire, who is alleged to have financed the activities of the party.

The Fascism of Le Bloc Populaire

It is in the proposals and policies of the party as publicly stated by Maxime Raymond that the observer can read the unmistakable signs of fascism, cloaked though they are by the adroit Machiavelianism imparted to Raymond at Laval University.

In answer to a question regarding the objectives of the Bloc, Raymond replied that the party desired 'autonomy' for the provinces and equality for the two chief 'races.' Its economic policy is based 'on the family as an institution' and on 'professional organization.'

Hitler's fascist party started out as a separatist movement for Catholic Bavaria and the Rhineland to join with Catholic France. The Bloc, under the name autonomy, would set up a clerical fascist state in Quebec allied in concept to the clerical fascist states of Europe and South America. Raymond evades a direct admission of 'separatism' but states that abuses from the rest of Canada have caused the idea of separatism to arise in Quebec 'out of the injustices which the French Canadians have suffered.'

This insistence on harping on the 'abuses and injustices' to which the French Canadian people have been subjected has also a familiar ring echoing from the 'injustices' suffered by the Germans, Italians, Japanese, and other fascist people who have used the word 'race' upon which to inflame the emotions of their people. One of the chief characteristics of the Bloc is shown in its phrase: ' . . . for the two chief races, equality.' In reality this reference to race, which occurs again and again in Bloc pronouncements, is the means by which Quebec 'nationalism' can be emotionalized. It is closely associated with the demand for the autonomy of Quebec, the maintainance of the French language in Quebec, and the imposition of French as an 'official' language in the provincial services of the other provinces as well! Associated with this is the effort to capitalize on the religion of the people of Quebec which is overwhelmingly Roman Catholic. As in all Roman Catholic countries, the Church exerts a great influence on the lives of the people. The Bloc Populaire states that its economic policy is based on the family and the 'family is the matrix of society.' The appeal which this is likely to have to the humble Roman Catholic peasant and factory worker in Quebec cannot be overlooked. One election pamphlet issued by a Bloc candidate proposed that the parents of every baby born in Canada would get $100 a year for 10 years and that every newly married couple would get $1,000 a year for 10 years.

It is when we come to analyze

the economic proposals of the party that the truly fascist character of it is exposed. Professing to be the enemy of capitalist concentration of wealth on the one hand and the power of a state monopoly on the other hand, the Bloc proposes that 'order can be reintroduced into society only by the agency of a powerful professional organization.' It is necessary to establish 'between the family and the state intermediate bodies fulfilling economic and social functions which the state has been obliged to assume so as to maintain order in the face of evolution . . . . ' A statement by Maxime Raymond goes on to say that: 'These intermediary bodies will . . . emerge from private enterprise by association of the different elements which compose it—employers, workmen, employees, technicians—to set up independently a kind of government of economic life . . . . '

Stripped of its cloudy verbiage, this is the corporate state structure as perfected by the Duce of Italian fascism—Mussolini, the Heel of Heels. According to a description in the Encyclopedia Britannica the basis of the system is found in the act of 1926 'regulating the legal and economic representation of employers and workers in all industries (including agriculture) trades and professions. For each category of employers and for the corresponding category of workers (manual and non-manual) the law provides that syndical associations may be formed and incorporated . . . they must be organized to protect not only the economic but moral, educational and professional interests of their members . . . ' In other words, these are the 'professional organizations' proposed by the Bloc Populaire.

Britannica goes on to say: 'The act contemplates the formation of such associations for all branches of production and all forms of activity, with the exception of the civil services, state industries . . . which are otherwise provided for . . . . Fascist syndicalism works through class collaboration and aims at organizing the guild state . . . . '

The act of setting up the so-called 'professional organizations' in the case of Italy provided for the formation of syndicalist organizations for each category of workers. These in turn are federated into provincial unions, which in turn are grouped into national federations and finally into seven confederations. On the other side are six federations of employers of labor. The functions of these are neatly described in the words of Maxime Raymond when he says: ' . . . it is absolutely necessary to reintroduce between the family and the State intermediate bodies fulfilling economic and social functions . . . ' The purpose of the entire setup, of course, is to provide strict regulation and control of the work and economic life of the people.

A further description of the fascist economics of Italy is given in **An Outline History of the World Since 1914** published by Barnes and Noble, N.Y.:

'Early in 1919 Edmondo Rossoni united the principles of Syndicalism with Fascism and organized the Fascist Syndicates. They were: opponents of Communism and Socialist trade-unionism; advocates of ultra-nationalism; defenders of private property; proponents of economic representation rather than geographic representation in government: and opponents of class war but champions of class collaboration.'

Compare this to the economic program of the Bloc Populaire in the words of Maxime Raymond: 'The first efforts of the Bloc in the economic field will be the conservation and in some cases the restoration of private initiative . . . . As much as possible we intend to leave big industry to private enterprise . . . .' This proposal, however, contains a joker, a seeming contradiction. The Bloc flatly declares that the Province of Quebec would take over the power companies and handle all power as a 'provincial monopoly.' This is not nationalization. It is a proposal to set up a power monopoly to dispossess all non-Quebeckers and to centralize economic power in the hands of the proposed autonomous province. Hydroelectric power is the key to economic power in Quebec. He who controls that controls everything.

Some Facts About Quebec

Quebec produces 49 percent of the power output of Canada. It produces 100 percent of the aluminum (Shipshaw); 36 percent of Canada's lumber; 63 percent of the boots and shoes; 55 percent of the newsprint; 100 percent of asbestos; 75 percent of cotton textile manufacturing.

Realistically it must be realized that the population of Quebec is increasing at a greater rate than the rest of the Dominion. In the decade 1931-1941 Quebec increased 15.5 percent while the whole of Canada increased only 10.05 percent. Quebec now constitutes 29.07 percent of the total population whereas in 1921 it was only 26.87 percent. In 1941 Quebec's population was 3,331,-882 of whom 80 percent are of

French descent.

In the matter of enlistments in the Armed Forces of Canada as released late in 1943, the Province was rated at 13.7 percent of all its eligibles. As compared with this Nova Scotia and Prince Edward Island had enlisted 37.9 percent of their eligibles; New Brunswick 35.3; Ontario 32.8; Manitoba 30.9; Saskatchewan 27.1; Alberta 31.7, and British Columbia 34.8. The average for all of Canada outside of Quebec was 35.7 percent of its eligibles.

Says the **Financial Post** published in Toronto, Ontario: 'It is an open secret that the educational program in Quebec is antiquated in that it fails to train the young French Canadian to take his place in business and industry. The present system provides an excellent classical education, but almost wholly neglects the teaching of science or commerce . . . . it is a fact that technically trained French Canadians are a minus quantity . . . ' The **Financial Post** goes on to point out that: 'For over 300 years the teaching of Quebec youth has been in the hands of well-intentioned religious orders . . . .' As a consequence there is a deep-rooted and powerful opposition to changes.

This provides some information on the soil in which the Bloc Populaire is planting its seeds of dissent. Much more could be written. There are already many sores of dissention between Quebec and the rest of Canada. It is not Technocracy's intention to probe into these. We are attempting only to enlighten not to disparage. The security of this Continent and its social welfare are the objectives of Technocracy. These can be achieved only through the speedy winning of the war, the defeat of fascism abroad and at home, and the adoption of a uniform, consolidated operating technique for the technological production and distribution of goods and services on this Continent to all.

While United States and Canadian citizens (including French Canadians) are dying to defeat fascism abroad in Europe and Asia, the Bloc Populaire is operating as an unmolested party proposing a fascist setup on this Continent. The Bloc has consistently opposed conscription and overseas service for Canadians. The Bloc is against Canada's participation in the war. It favors 'a benevolent neutrality like Eire.' In answer to a direct question, M. Raymond replied: 'In no case should our country help to defend any national whatsoever of the British Commonwealth solely and simply because that nation is a member.'

The Bloc Populaire may live or die, but if it dies, an equivalent organization will take its place, for this is not an accidental product of agitation but an outgrowth of the cultural background of Quebec just as the Falangist movements are an outgrowth of the cultural background of the hacienda cultures south of the Rio Grande. These two cultures are the vestigial remnants of European feudalism on this Continent. Until they become Americanized, in the sense that they conform to the social and technological patterns of the rest of the Continent, there will continue to arise fascist movements from them that will be a menace to the rest of the Continent. In the case of Quebec, greater uniformity and consolidation with the rest of Canada is required as opposed to greater independence and separation. The members of Technocracy urge greater cooperation and unity within the Dominion and are against the division of Canada—politically, culturally, or technologically.

The Bloc Populaire in Quebec is the Canadian counterpart of the Catholic Centerist Parties of Europe. We must never forget that Heinrich Bruening and the Catholic Centerist Party dominated Republican Germany, and when the time came, the Catholic Centerist Party of Germany was voluntarily dissolved to make way for the German fascism of Hitler's National-Socialist Party.

The social destiny of this Continent cannot be achieved as long as the majority of this Continent permits alien political movements or financial and economic interest to subvert the interests of the people as a whole. The political or economic Balkanization of the Continent is treason to the Continent as a whole and to the individual countries concerned, and Technocracy stands opposed to any such trend on the Continent no matter where it may be manifested. **—CHQ, Technocracy Inc.**

Even as a Liberal, Raymond had been opposed to Canada's participation in the war, had been anti-British. The avowed aims of his Bloc Populaire are independence for Canada—which can only mean in effect withdrawal from the Commonwealth—autonomy for the provinces, equality of the two chief races, upholding of the family as an institution, and emphasis on a professional organization of society.

Those who will may smell the taint of fascism here.

—James Dyer in Vancouver Sun

Radium-Radio Receiver

What may turn out to be the greatest radio-electronic development since Marconi, is the subject of this revolutionary article. The Radium-Radio Receiver, with its cold radio-electronic tube, which uses no batteries or outside current of any kind, is so astonishing and so far-reaching in its import, that all of our radio receivers will soon undergo a complete change. How this great invention came about and how the inventor was persecuted by the large radio-electronic interests forms an equally astonishing adjunct to the annals of radio history.

—RADIO-CRAFT

IT has always struck me that our present radio means, as far as our radio tubes and radio sets are concerned, were nothing but clumsy makeshifts and that much better radio devices could be evolved in bringing radio programs to the masses.

Our radio sets and radio tubes have always suffered from too great a complexity, which necessarily increases the cost of the final receiver to such a degree that it often could not be acquired by the man of moderate means. It had always been my dream some day to produce a radio that would have **everything** and that could be sold for less than $10.00, yet be a really first-class set. If such a set were mass-produced, millions could probably be marketed for $5.00. These considerations were in my mind ever since the crystal set days.

Then we had a radio set without any batteries whatsoever. It didn't consume current from the lighting mains and it could be easily transported and used anywhere. It did not have resistors and a multiplicity of condensers—electrolytic and otherwise. It was small and it was cheap. Best of all, the reception was also crystal clear. But with the coming of the vacuum tube radio set everything was changed and the entire radio industry followed blindly in a groove in which it has been ever since.

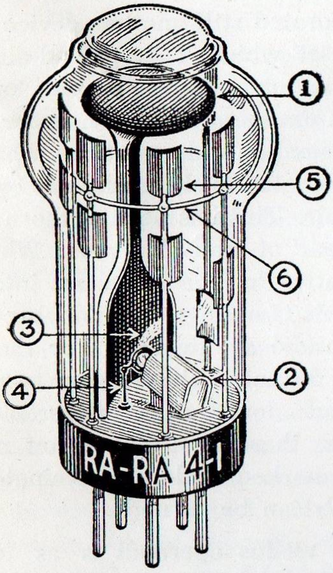
The Cold Radium-Radio Tube

Several years ago I started work on my **Radium-Radio Tube**—an electronic tube which requires no batteries of any kind. After the first few tubes had been constructed I was encouraged a great deal, so much that I finally evolved the revolutionary tube which is described in this article. Shorn of all technical language, the new cold Radium-Radio electronic tube makes use of radium for its electronic emission. This is not a new thought but is as old as radio itself, but up to now no such tube could be constructed because **radium emanates both positive and negative emission**, making such a tube useless. I then conceived the idea of using a magnet inside of the tube, using one pole of the magnet as a plate. Now radium, as we all know, emits two kinds of rays—the so-called Alpha and Beta rays. Both are deflected by an ordinary magnet but, fortunately, in opposite directions. Thus, by making the plate, or cathode, one pole of the magnet, I can utilize the Beta rays which in reality are ordinary electrons, just as they occur in a standard vacuum tube. Then I can utilize the Alpha rays on the other end of the magnet. I use these Alpha rays in conjunction with the well-known 'multiplier' device and thus increase the electrical energy obtained from the radium to operate the tube.

Best and most important of all, the theoretical life of the Radium-Radio Tube is as long as the life of radium—2500 years. There being nothing to burn out, nothing used up except the infinitesimally small amount of radium, the tube for all practical purposes will be everlasting. I have had tubes of this type in constant operation for over two years and they keep on working uninterruptedly, without any attention of any kind, day and night, month after month.

The reader may ask: 'By using radium in the cold Radium-Radio Tube, does this not make such a tube very expensive?' The answer is 'no!' Radium has come down in price until now it only costs $25,000 per gram, where originally it cost $150,000 per gram; but in my tube I only use the merest speck of radium, so little, in fact, that only about 30 cents worth is put into one tube.

But I was not satisfied just to revolutionize the radio tube and all that goes with it—I wanted a radio set that would be a fit companion to this remarkable tube. After I had constructed a number of them, it was found that the sensitivity as well as the power of these tubes was unbelievably great, so great, in fact, that for the average home-radio set I require only a solitary tube. **Indeed, one tube is so powerful in its output, due to its terrific electronic emission, that instead of using a volume control on the speaker I had to use what I call a 'volume throttle.'** The power of the tube, in other words, is so great that if the entire power of the single tube were turned loose into the loud-speaker, it would shatter it and burn out the field windings. For this reason, for the first time in a radio set, it was necessary to incorporate small fuses in the speaker circuit to protect it!



RADIUM-RADIO TUBE

The above illustration shows an idealized view of the new tube. (1,3) Reflecting parts of the magnet. (2) Lead container with radium. (4)Grid. (5) Reflecting vanes. (6) Glass vane supports. For clarity's sake, the resistors have not been shown in this illustration.

Another new and quite revolutionary point of this set is that **it is never turned off.** Having no batteries or no electric current to save, it is therefore unnecessary to turn the set off completely. The volume throttle is constructed in such a manner that when you turn it 'low' the receiver will operate at a mere whisper.

You may ask: 'Why do this? Why not turn the set off entirely?' The answer is very simple. Radio engineers have for many years tried to find means to keep a set turned on at a low volume, then when important news came over the radio set it could be turned up automatically, so that the owner would get urgent broadcast news. That is exactly what I have accomplished in my present Radium-Radio Receiver. This is how it works: At the broadcast station we have a special metallic gong arranged in such a manner that it will give a certain musical note. When this gong is struck with great force, a more than normal power-note is broadcast. In my set I have a tuned reed. This reed is tuned only to this special radio gong. **Remember that the set is never turned off.** When this special note comes over the radio circuit in the set, the reed starts vibrating thereby making a contact which turns the set on to its 'high' volume point. Immediately the news, such as important war news, catastrophies, etc., is received with full power on my new radio set, and with such strength that the entire household cannot fail to hear it. The volume is strong enough to wake up a hearty sleeper. After the news has been received, the owner of the set turns it down again to the 'low' point and the receiver is then ready for the next impulse when it comes along.

The Radio Alarm

This impulse—but a different kind—comes early in the morning when you desire to be awakened. Besides the special reed for news and other purposes, I provide four more extra reeds. Number 1 is marked 5 a.m.; Number 2, 6 a. m.; Number 3, 7 a.m.; Number 4, 8 a.m. Before you retire you turn a little knob which puts one of the reeds into the circuit. **Each reed is tuned to a different note.** Every broadcast station (besides the large 'news gong') will have four other gongs or whistles, all tuned to the four reeds of your set. Suppose you wish to get up at 8 a.m. and have turned the little knob on its appropriate reed marked 8 a.m. In due time in the morning the 5, 6, and 7 o'clock gongs or whistles will sound in the broadcast station (to which your set is tuned), but nothing happens because none of the three reeds will be in the circuit, but at 8 o'clock the last reed will be connected and, consequently, it will begin to vibrate, thus making its appropriate contact. This automatically turns on the set to 'high' and the radio goes on full blast, awakening you on the dot.

The Ad-Plug-Eliminator

That, however, is not all. I incorporated still another device in my set which I term 'ad-plug-eliminator.' Many people have been exasperated by a number of the smaller radio stations which plug continuously trashy ads over the air. This has been a 'thorn in the ear' of many listeners. While lucrative for the broadcast interests, it is often very annoying to the radio set owner. For those who do not wish to listen to repeated low class advertising plugs, there is a button on my set marked 'ad-plug-eliminator' which can be turned.

Its **modus operandi** is as follows: I used the now well-known memory device of which several are made at the present time. This is nothing but an electric robot which has a 'memory.' I have improved upon the present device in such a manner that once the radio set 'hears' one of the many ad plugs, it stores it permanently in its mechanical brain. Then as soon as the same advertising plug begins again, the robot cuts the set off the air until the plug is finished, then the set is turned 'on' again. In practice this works very well, but it is not to be confused with dignified occasional advertising of important programs. Only those 30 seconds or one minute **pure** adplugs which are a bane to so many people nowadays, are affected.

Now you would naturally assume that a great revolutionary invention of this type should get an immediate acceptance by the large radio manufacturers, but alas, the contrary is the fact.

A Persecuted Inventor

When I had my final model built, I immediately made it my business to go and see one of our great radio set manufacturing companies. They seemed much interested, but insisted on buying the invention outright. Having had such experiences with other inventions of my own, I told them I was not interested in any outright sale but preferred a royalty arrangement; I indicated I would be satisfied with a modest royalty for each tube and set. After several months of haggling, nothing came of all this, until one day I was called into the office of the president of the corporation who proceeded to give me a long lecture. I do not wish to tire the reader by telling him all that transpired there, but the following was made plain:

The president called my attention to the fact that a revolutionary invention such as mine would immediately raise havoc with the following powerful interests:

(1) the radio tube interests;
(2) the radio set-building industry;
(3) the electric light and power industry;
(4) the alarm clock industry;
(5) the battery industry;
(6) a goodly number of others.

The president pointed out to me that, for instance, the radio tube interests would immediately have business cut tremendously because my set uses only a single tube. Worst of all, with a tube lasting theoretically 2500 years, there would be no tube replacements and once a tube was sold that would be the end of it, consequently the radio tube business would be 'shot to Hell in no time'—these were the president's exact words.

Then there was the radio set building industry. Instead of getting prices anywhere from $50.00 to several hundred dollars for a set, 'they will starve to death by making your cheap and popular **pauper's set.**' I am using the president's words verbatim again.

Then there would be the electric power interests. These gentlemen, too, would be hurt tremendously, because today radio sets use a most substantial amount of power; this is a very lucrative business which the electric power industry would miss severely.

Next in line was the venerable old alarm clock industry, which by means of my 'crazy fool' set would be totally deprived of all of their business. Three-quarters of them would surely go out of business entirely because my radio receiver, being in a way an alarm clock itself, would be too powerful a competitor for the alarm clock business, thought the president.

That leaves the broadcast interests, who, as I have already hinted above, would now be deprived of one of their most lucrative business plums—that is, short ad plugs now so common in America. Inasmuch as most of the small radio stations have to depend upon this type of business and as 'that is their bread and butter, your hair-brained crazy "mouse-trap" would put 60 percent of these poor stations out of business immediately.' I am once more quoting the president.

Then there is the battery industry which would be deprived of their 'B' battery and 'A' battery (portable sets) business as well, according to my spokesman. He cited several other industries which I was about to kill, and he left me dazed when he handed me a tabulation of all the millions of dollars' worth of business which my invention would exterminate with one 'fell swoop'—in the president's words.

Losses to Affected Industries Due to Radium-Radio Set

(1)	Radio Tube Companies	$128,000,000.06
(2)	Radio Set-Building Industry	226,000,000.58
(3)	Electric Light & Power Industry	74,950,000.89
(4)	Alarm Clock Industry	46,890,000.65
(5)	Battery Industry	24,650,000.28
(6)	Other Industries	74,000,000.95
	TOTAL LOSS	$574,490,003.41

I told him that I could see some justification in his contention, but I also said that progress was like that and that the same argument could have been given to the inventor of the automobile, which put the horse and carriage trade out of business, too. I quoted many other new inventions which worked havoc in a parallel line. 'But,' I continued, 'you also must remember that when one of these revolutionary inventions comes along, it also benefits the public at large, and, damn it, I'm for the public—first, last, and always.'

Then I gave him my ultimatum and told him that if he and his interests did not wish to buy my great invention at my own terms, I would start in the manufacturing business with private capital and manufacture the tubes and sets myself. He got very angry at this and we parted enemies.

That was the beginning of my troubles. One night when I was putting the finishing touches to my radio set in my laboratory, there came a knock on the door.

Being unmarried, I had only one good and trusty friend, and that was Annie. Annie is my pet ant-eater. She was very useful around the laboratory because at one time I was interested in ants and built those little ant-houses—the contrivances with live ants which you study through a plate glass. Sometimes some of the ants would escape, then Annie would eagerly lap them up so that they would not run all over the house and laboratory. Annie, too, liked to eat sawdust and small shavings, and when I was busy filing a piece of metal she didn't mind eating some of the filings, as 'roughage.'

Well, as I said before, there was an ominous knock at the door. Innocently enough I opened it, only to have a couple of burly gangsters jump me and I was tied hand and foot in no time. Poor Annie, too, was kidnapped along with me. They put her in a canvas bag, however, and lugged her along. There followed an interminable automobile ride and I sure thought my end had come. At dawn we pulled up in a wild-looking place which afterwards proved to be a small island in the midst of a lake.

For two years I was confined in a sort of prison with a heavy iron grating, making my escape impossible. I was treated well enough during this period and we had enough food. When I say 'we,' I mean Annie and I. If it had not been for Annie, I think I would have died of loneliness. Several months ago during a terrific storm with an accompanying fire, I found a chance to escape—how I shall not say here for a number of reasons. I immediately decided that my life was no longer worth a plugged nickel, because I knew that the big interests were after me and would use every possible means to stop me from marketing my invention.

So I decided that I would publish my entire invention in the pages of my favorite magazine, **Radio-Craft,** because I knew they would be courageous enough to at least give the world the news of my epoch-making inventions.

Unfortunately, there were several reasons why I could not prosecute the big interests which kidnapped me and kept me out of circulation for two years. The main reason is that I have no absolute proofs against them. Then Annie was still in 'jail' and I was in mortal fear that if I mentioned any names the gang would probably kill the poor companion of my kidnapping days.

Since I returned home, I have

written the president of the great radio corporation and told him that unless Annie was returned on a specified date, I would expose him and his bloodthirsty gang.

The puzzling part of the entire proceedings is that the day I finished this story, I received a mysterious telegram from the president. Curiously enough, it contained only this: APRIL FOOL.

—**Mohammed Ulysses Fips**

This article illustrating the sabotage of science and invention by the Price System has been reprinted from the April 1944 issue of Radio-Craft magazine by permission of the editor-in-chief Hugo Gernsback.

Radium-operated radio tubes have been suggested since the earliest days of the industry. One great obstacle has hitherto prevented the use of radium for the job. While the cathode surface coated with radium (or a radium compound) would emit electrons, and while that emission would last for centuries producing a tube with a fantastically long life, the hitch is that radium emits **both positive and negative particles.** Thus the anode would remain at the same potential as the cathode, and there could be no external flow of current.

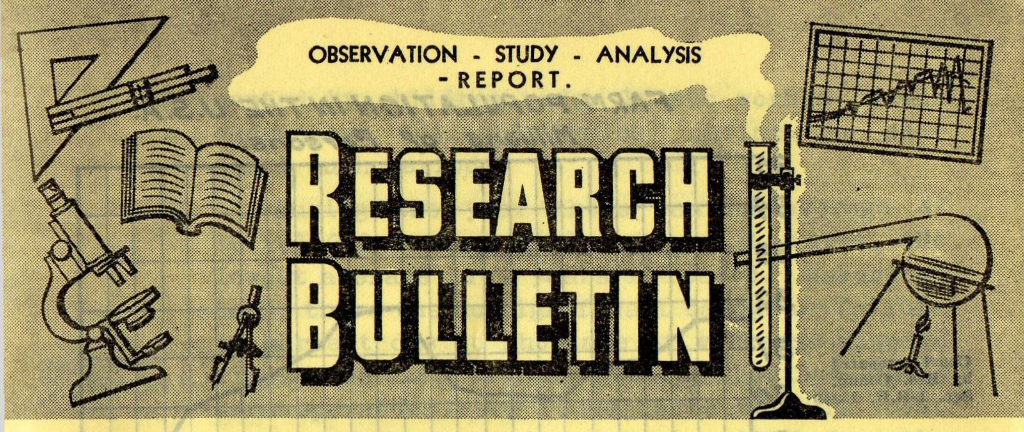
The method used to solve this problem in the Radium-Radio (Ra-Ra) tube is simplicity itself, the only surprising thing about it is that someone has not stumbled on it earlier. The Alpha and Beta rays of radium are deflected by an ordinary magnet, but **in opposite directions.** The anode of the Ra-Ra is a magnet. The pole nearest the cathode is so shaped that the Beta rays, which are ordinary electrons, are deflected to the first of the multiplier plates which form an essential part of the tube. The Alpha rays are bent very slightly in the opposite direction and impinge on the pole-piece, or anode, giving it an extremely high positive charge.

Emission of Beta rays is controlled by the grid, which for electron-optical reasons is shaped like the grid of a thyratron. Means may be provided for keeping it negative with respect to the cathode. This tends to accelerate the positive Alpha particles, and permits raising the anode to a higher potential, while not affecting the control of the Beta rays, or electrons emanating from the cathode.

A lead from the magnet-anode is brought out to the external high-voltage terminal of the tube. This is also connected through a resistor to the mutiplier bank. The latter is constructed according to standard multiplier practice, resistors inside the tube maintaining each multiplier cathode-plate at a suitable voltage below the next one above it, etc. The lead from lowest-voltage multiplier plate is returned to the emitter, which is also grounded. A variable resistor across the entire multiplier bank controls emission and acts as a volume control when the tube is used in radio reception.

The final collector is returned to the magnet-anode through the load, which may be a loud-speaker, relay, or indicating device.

Under test, the Ra-Ra 4-1 worked well from 1 cycle to 300 megacycles. The electrode spacing of the tubes so far constructed has been adapted to work at audio and low radio frequencies, and there is little doubt that tubes designed for the work will oscillate far into the UHF region. —**S. R. Mann, Engineer in Charge Ra-Ra Development**



OBSERVATION - STUDY - ANALYSIS - REPORT.

RESEARCH BULLETIN

JULY, 1944 Prepared by Research Committee R. D. 12349-1 NO. 28

Will the Farmers Go Back?

(Third installment and conclusion)

Technocracy Digest May and June 1944

In the two preceding installments of this study we have examined the Canadian agricultural situation in 1943, covering in detail, the supply of manpower and machinery; export of agricultural products; civilian food consumption; cold storage holdings; grain and livestock supply; production of main food items; and the production quotas for 1944.

The next item is a short resume of the farm situation in the U.S. in 1943.

Agricultural developments in the U.S. during recent years have been similar to those in Canada, although the employment-production ratio for 1943 was less spectacular.

'Farm Population Estimates' Bureau of Agri. Economics, U. S. Dept. of Agri.

As is shown in the chart the farm population has been decreasing since the end of the depression. It is estimated the migration from the farms to the armed forces, to cities, etc., since the start of World War 2 amounted in 1940 to 681,000; in 1941 to 1,357,000; and in 1942 to 1,627,000.

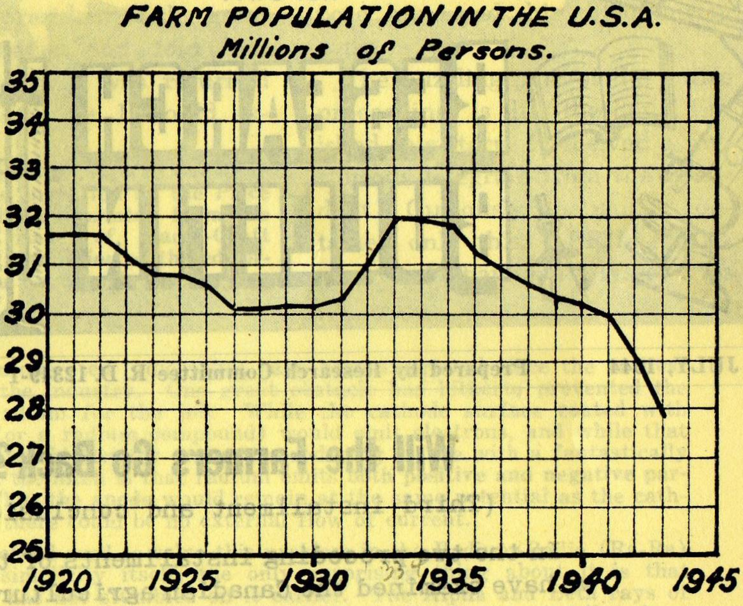


Chart prepared by Res. Comm. Sec. 1-R.D. 12349

Since November 1942 farm workers have been protected from the army draft, and even though there are now over one and one half million deferred workers on U.S. farms, total migration from the farms amounted to approximately 4 million persons by the end of 1943.

However the total number of persons employed on the farms did not decline much although the quality and effectiveness of the work was probably much less. Women and children, who did not formerly work, were employed. More than 2.8 million women living on farms, wives, daughters, etc., made up 23.2 percent of the total engaged in agriculture from May through October 1943 and put in about 16.2 percent of the agricultural work of the period. Almost two million youths, 14-17 years old did some farm work in 1943. Of these, 500,000 were non-farm youth, greatly aug-

'Farm Working Force of 1943', U.S. Dept. of Agriculture.

mented by children under 14 who worked in the emergency 'twilight armies' during the seasonal rush periods.

During the year there was an average of 10,263,000 persons employed on U.S. farms, the lowest average in 35 years of record. Nevertheless, there was no significant damage or failure to harvest due to shortage of workers--despite widespread expectations of labor shortage. While farm operators were found to be working about one hour longer per day than they did before the war, hired hands were working only slightly longer.

'Farm Labor' Dec. 1943, U.S.D. of A.

During 1943 the supply of agricultural equipment in the U.S. was far below requirements, although more available than was the case in Canada. Steel going to the U.S. farmer in 1943 was estimated at 480,000 tons; of this 250,000 tons went into implements, production of which was about 25 percent of 1940. In 1942 steel going to the farms totaled 570,000 tons; in 1941--1,153,678 tons; in 1940--919,502 tons. In 1928 steel going to the farms totaled 2,255,907 tons.

'Steel' Jan. 1944

Despite the inexperienced farm workers and the shortage of equipment and machinery, crop production in 1943, while 6 percent less than 1942, was still over 5 percent greater than any other year. Aggregate production of the 53 main crops was up 9 percent over the overage for 1937-41.

Acreage of crops harvested in 1943 was about 347,500,000 and exceeded 1942 by more than 9 million acres.

'1943 Annual Summary' U.S.D. of A.

Total tonnage of important commercial truck crops in 1943 for marketing fresh and for processing was less than in 1942 but greater than for any other year except 1941.

Some of the production achievements of 1943 were outstanding:

FIELD CROPS

The corn crop, 3,076,159,000 bu. was slightly below record of 1942 and over 30 percent above 1932-41 average.

Wheat--836,298,000 bu., 14 percent below 1942 and 13 percent above the 10 year average.

Oats--1,143,867,000 bu., 15 percent below 1942 and 12 percent above the ten year average.

Barley--322,187,000 bu. 25 percent below 1942 and more than 30 percent above 1932-41 average.

Flax--52,008,000 bu. compared to 41,053,000 bu. in 1942; 16 millions above the third largest crop, in 1902.

Rice--70,025,000 bu., 8 percent above 1942 and 48 percent above average.

All sorghums--103,168,000 bu., slightly below 1942 and 68 percent above average.

'1943 Annual Summary' U.S.D. of A.

All hay--almost 100 million tons; 5 percent below 1942 but greater than any other year.

Dry field peas--10,870,000 bags (of 100 lbs.); 47 percent above 1942; over four times the average.

Soybeans--195,762,000 bu., 5 percent above 1942; compared to 10 year average of 51,571,000 bu.

Peanuts--2,561,610,000 lbs.; largest on record and 16 percent above 1942, the previous record year.

Hemp fibre--134,251,000 lbs. Almost 10 times the 13,922,000 lbs. of 1942; 1938-41 average was 2,901,000 lbs. In this crop, abandonment totalled 18 percent of planted acreage.

Potatoes--464,656,000 bu.; 1942 production was 370,489,000 bu. and the 10 year average 363,322,000 bu.

Three citrus fruits--6,489,000 tons; production in 1942 was 6,295,000 tons. Next highest year, 1940, was 5,659,000 tons.

LIVESTOCK

In addition to producing enormous crops, a substantial part of the farmers' efforts was devoted to producing livestock. Aggregate production of sheep, cattle, hogs, poultry, eggs and milk in 1943 was about 8 percent above 1942, 31 percent above the 1937-41 average, and 31 percent above any previous year.

'Meat Animals, Farm Production and Income 1942-43' U.S.D. of A.

During that year, farm production of meat animals reached a new high of 46.1 billion pounds. For the sixth consecutive year the output of meat has exceeded that of the previous year, with 1943 production 47 percent larger than the 1932-41 average, and 71 percent above the 1909-14 average.

Production of cattle and calves in 1943 is estimated at 18 billion pounds liveweight, the largest on record; exceeds 1942 by 452 million pounds; and exceeds the 1932-41 average by 3,685 million pounds.

Production of hogs reached a new high of 25.5 billion pounds; 4.5 billion pounds larger than the previous record of 1942.

1943 production of sheep and lambs is estimated as the third largest recorded; 8 percent below 1942. However the sale of sheep and lambs during 1943 amounted to 3.0 billion pounds, the largest on record.

DAIRY AND POULTRY PRODUCTS

The production of dairy and poultry products also required a great deal of the farmers' efforts.

'Farm Production, Disposition and Income from Milk 1940-43'; U.S.D. of A.

Milk produced on farms in the U.S. in 1943 is estimated as 118.1 billion pounds; about 1 percent below 1942 and higher than any previous year.

The average number of milk cows on farms in 1943 was 25.7 million head, about 2 percent more than in 1942.

The number of cows and heifers, two years and over, kept for milk as of Jan. 1st has steadily increased each year from the 24.6 million of 1939 to 27.1 million in 1943.

Total cheese production for 1943 was 979, 885,000 pounds, less than the 1.1 billion pounds of 1942, but over 200 million pounds above the 1937-41 average.

Turkey production in 1943 was 32,565,000; 22 percent above the 1932-41 average.

Chickens numbered 846,555,000; 20 percent above 1942, and 39 percent above 1932-41 average. In addition, production of 'commercial broilers' has almost doubled since 1940; in 1943 it amounted to 251,649,000 birds with an average weight of 2.93 lbs.

'Farm Production 1942-43' U.S.D. of A.

The number of chickens on farms at the end of 1943 was 572,460,000 (excluding broilers); 6 percent above the record year of 1942 and 35 percent above the 1933-42 average.

Egg production totalled 54,165 million, up 12 percent over 1942.

From the above it is apparent that the shortage of skilled farm labor did not seriously interfere with farm production in the U.S. during 1943.

Although no estimates are available covering the increase in productivity per worker in the U.S. during that year, such estimates are available for Canadian production.

THE CANADIAN ADVANCE

Speaking of the Canadian situation at the Chicago meeting of the American Society of Farm Managers and Rural Appraisers, in late 1943, Dr. Hope said:

See chart reference below.

'During the four years of war agricultural production has risen rapidly in spite of the decline in the number of male agricultural workers.

'This rapid expansion in agricultural production, coinciding with the reduction in male workers, has resulted in a phenomenal increase in production per male worker. Based on 1938-39 as 100 the production index per male worker was 166 in 1942 and 163 in 1943.'

The following chart by Dr. Hope shows his estimates on the increase in productivity per farm worker in Canada during 1943. That his estimates were too conservative was indicated by statements from the Department of Agriculture early in 1944 after the final returns were in for the previous year.

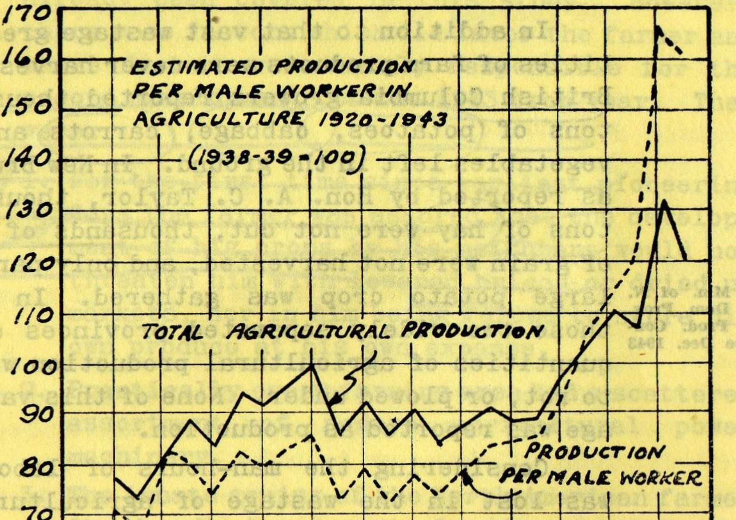


Chart by Dr. E. C. Hope, Dept. of Farm Management, U. of Sask., from 'Country Guide,' Jan., 1944

On January 6th Canada was informed that the Agricultural Department estimated the output of the average farm worker in 1943 to be 86 percent greater than in 1939.

Ottawa dispatch in all Canadian News Services Jan. 6th, 1944

On January 14, Minister of Agriculture Gardiner in speaking on Canada's agricultural possibilities, stated that there had been vast increases in most production lines, with an averall increase of 48 percent in output compared with 1938.

'Monthly Review of Business Statistics' Sept. 1943

Even these figures do not give the complete story of the farmers' increase in productivity. Drought hit hard in Canada in 1943, and complete or near complete crop failure affected over 880 Alberta and Saskatchewan townships. About $6 million was paid by the Government to assist the farmers of those areas, but the hundreds of thousands of man-hours used in cultivation, planting and replanting those farms did not show as production.

Agri. Min. of N. B. at Dom. Prov. Agri. Prod. Conference Dec. 1943

In addition to that vast wastage great quantities of farm products were never harvested. In British Columbia growers reported thousands of tons of potatoes, cabbage, carrots and other vegetables left in the ground. In New Brunswick, as reported by Hon. A. C. Taylor, thousands of tons of hay were not cut, thousands of bushels of grain were not harvested, and only part of the large potato crop was gathered. In between those two widely separated provinces enormous quantities of agricultural production were left to rot, or plowed under. None of this vast wastage was reported as production.

Considering the man-hours of labor which was lost in the wastage of agricultural products in 1943, compared to that of the pre-war years, it is probable that, in the actual production of our year-end crop totals, the productivity per worker was considerably higher than even the 186 percent of pre-war estimated by the Department of Agriculture.

Various politicians have tried to explain away that almost amazing increase in productivity by claiming the farmers worked harder and longer each day--'busier hours and more of them'.

Canadian farmers have always worked long hours during the busy season and the number of hours per day per worker on Canadian farms was probably similar to that worked on U.S. farms in the same year. In the U.S. it was found that the average farm operator worked about one hour longer in 1943 than before the war, and that hired help worked only slightly longer on the average.

In developing that great increase in productivity per worker the farmers had many unfavorable factors to overcome, some of which have already been covered in this study. However, there were factors which did favor the farmer and these factors were mainly responsible for the record developments of the 1943 crop year. They were:

Good

1. For the first time since earliest pioneering days the farmer was assured that the development of big crops by his neighbors would not threaten him with lowered prices or dried up markets, nor in him being forced to store his own produce at his own expense.
2. Practically every farming area had a scattered assortment of modern agricultural power machinery.
3. The innate genius of the North American farmer for developing practical gadgets and 'make-do.'

4. The inherent willingness of the farmer to co-operate with his neighbors whenever possible.
5. The availability of electric power.

These favorable factors proved to be of greater importance than the shortage of good weather, the shortage of labor, and the shortage of repair parts, or all three combined.

The farmers in Canada, as in the U.S., have learned in the last 40 years, that heavy crops were assets only when heavy crops were not general; that there was an automatic inverse ratio between abundance and price. Under those conditions it has been each farmer against all other farmers; every man for himself-in competition with all others for markets and prices. Asking the farmers for increased production under conditions of declining manpower and shortage of equipment was equivalent to a blanket order for everything he could produce, and it radically changed the circumstances under which farmers had learned to base these prospects of success.

However, during that year the Canadian farmers learned some new lessons in co-operation, in production, and in the relative importance of labor and power-equipment. They learned that their individual success depended upon their group co-operation. They learned to think of individual production in terms of group effort. At the same time the farmers learned that labor-saving machinery would really save labor. In the past modern power-equipment had generally been used to speed up small or individual operations. The use of such equipment has usually been to do jobs quicker, or to make work easier. In 1943 labor-saving power-machinery was put to use on a wide scale for the first time, with the purpose and intention of saving labor.

With the farmers thinking and acting collectively, and all faced with the necessity of saving labor, the co-operative use of all available equipment became the general rule. This co-operative use of equipment demonstrated, as never before, that toil is unnecessary and useless when machines are available which can do the job better and quicker, at less cost.

The farmers were quick to learn and before the end of 1943 machinery co-operatives were being organized in Western Canada for the purchase and operation of equipment. Under the stimulus of co-operative effort the characteristic ingenuity of our farmers developed a multitude of skilful improvisations to harness more power to the task of increasing production.

Technocracy has pointed out that in the last century there has developed on this Continent a fundamental difference between our present North American economy and the economy of any previous time or of any other area; that throughout history in other areas, and until recently here, an increase in production of any commodity was brought about only by increasing the number of man-hours of labor devoted to such production; but that, in our time, on this Continent, an increase in production is invariably brought about through the installation of more power equipment and the use of fewer man-hours.

good

An examination of the employment and production records of North American Agriculture in 1943 makes it abundantly clear that in agriculture, as in all other phases of productive industry, there is a progressive increase in unit out-put per man-hour of labor, and a progressive decrease in total man-hour employment.

These trends will be of enormous importance to agriculture on this Continent in meeting the war demands of 1944. The demands have increased for this year and the man-power shortage has become even more acute than in 1943.

In the U.S. 'Farm Labor' reports that the average number of persons working on farms in 1943 was the lowest in 35 years; that on April 1, 1944, the index of available farm workers was 54 percent below the 1935-39 average. The number of unpaid family workers was about 200,000 less than the April 1 average of 1935-39; and the total of hired workers was 16 percent below that of 1935-39 average and 10 percent below 1942.

These figures represent the total number of persons ten years of age and over doing farm work, including migratory workers, foreign importees, prisoners of war, or any other persons, provided they did two days work in the week previous to the date of the monthly report.

'Farm Labor' of April 17, 1944 says:

'' . . . many of the people now on the farms do not have the work capacity of those formerly employed but in a record of persons working they are counted the same as more experienced help.''

In Canada the man-power supply is declared by National Selective Service officers to be tighter than ever before, and new compulsory service orders are considered by them to be the only hope of supplying the required workers to industry during the present crisis of labor supply.

In British Columbia alone about 10,000 men joined the armed services between September 1943 and April 1944.

In both Canada and the U.S. the supply of emergency workers, the seasonal help which made up the ''white collar brigades'' and the ''twilight armies'' of 1943 will probably be less numerous than last year, due to the increased draw-off to the armed services and the intensified activity of other branches of industry.

MACHINERY

In both countries the farmers have been promised more new machinery and more repair parts during 1944-45. How much of that equipment will be made available for use in this year's agricultural operations is not known.

'Tabulations from U.S. Census' Oct. 1941, U.S.D. of A.

The demands for repair parts in 1944 will be heavy. The U.S. Department of Agriculture recently reported that the age of tractor drawn or mounted implements ranged from 3 years for the smaller combines to 9 years for larger combines, drills and binders. The average age of horse drawn equipment was several times that of the mechanically drawn; the age of horsedrawn binders, for instance, averaged 19 years. The 1941 census showed that the average age of the latest model tractor was 7 years.

The Canadian farmers have been under war restriction since 1940, and their equipment probably averages greater age than that of the farmers in the U.S.

In 1944, North America asks her farmers for greater production. The supply of farm machinery will probably be greater than 1943 and the supply of farm workers will probably be less than in 1943. Under those circumstances it is practically certain that agricultural production in 1944 will be greater than in 1943, and that the productivity per farm worker will be even more amazing to those who visualize greater production only in terms of working more people more

'Farm Working Force of 1943' U.S.D. of A.

hours. Farm workers in the U.S. worked between 20 and 25 billion hours to produce the record crop of 1943. That many hours worked in 1944 will probably produce even greater records.

Probably the relative unimportance of man-power in modern agricultural production is best shown in a comparison between Ontario and Quebec, two provinces with comparable types of produce, size of population and in number of farms. In 1943 Ontario's farm production was almost double that of Quebec in value. But that is not all. Military demands and war industries had made greater drain on Ontario than on Quebec. Up to Sept. 30, 1944 the percentage total intake into the armed forces of the male population between 18 and 45 was only 17.7 percent in Military District No. 5 (Quebec) compared to intake of 37.3 percent for the lowest Ontario Military District and 42.7 percent for the highest. Further, on February 17, 1944 Defense Minister Ralston's statement in the House of Commons showed that the Quebec District led all others in desertions from the army. Quebec apparently has the high man-power, and Ontario the high production.

'Canada at War No. 32' Jan. 1944

POLITICAL PROMISES

Politicians of every shade are promising security and peace for the North American farmers after the war. Politics and business are indulging in a multitude of post war plans, all of which pivot on the desire to hide more people on the farms and away from the cities. Plans for the Rehabilitation of the men of the armed services, and re-settlement of the workers in war industry, all are based on putting more people on the land.

In the U.S., the Secretary of Agriculture speaking of farm settlement stated he expected

November 17th, 1943

10 million of the armed forces and 10 million now in the munitions industries to be placed after the war. A typical Washington plan, reported by Professor H. B. Walker to the Tractor and Implement Club, visualizes 2 million more farms after the war; small suburban type of farms which would use small implements and would not increase commercial production. Of the present 6 million farms, he pointed out, 2 million produce 85 percent of the agricultural production; 2 million grow 13 percent; and the other 2 million grow only 2 percent. The added 2 million would grow only another 2 percent.

In Canada similar plans range all the way from more farms with more electricity and more power equipment to 'jobs for all' through increased export of agricultural products to Asia and Europe. In British Columbia the Provincial Government has made a gift of one million acres for the settlement of returned service men. Who is to to pay the estimated average cost of $350.00 per acre for clearing the million acres has not been made clear.

None of the plans offer any solution to the problems which will face the farmers after the war. Still less do they offer any solution to the problem of resettling the men of the armed services and war industries.

Plans for increasing farm employment through providing more electrification, or more machinery are obviously contrary to the facts of the situation. Electric power on the farms has played a big part in increasing production per man-hour of labor. Another important contribution of electric power has been through the comparatively new cold storage locker plants service. By using these facilities the farmers were able to have their animals slaughtered, cured and stored, their fruits and vegetables stored, while the farm help was busy on the farm.

The plans to increase the number of farms are contrary to the trends on this Continent, and are merely attempts to re-establish the condition of mid-depression. Four years ago the U.S. Department of Agriculture found that only one-third of the farms of the country provided full time employment for at least one person. That one-third was probably the 2 million farms which grew 85 percent of the production.

The chart on U.S. farm population clearly shows the rapid flight of people to the land during the depression, as they sought to assure themselves at least enough food to maintain life. The chart also shows the rapid movement of the people from the land as 'pump priming' made it possible for them to live elsewhere.

The trend on this Continent is to larger farms with heavier power equipment, and more of it.

Plans to employ more farmers through increasing our exports of farm produce are doomed to failure before they get past the planning stage.

During the war years Canada and the U.S. have made every effort to increase the already tremendous export of farm products; unprecedented amounts of farm products have been used in the manufacture of munitions of war, and in feeding the population of the Continent.

During these same years total farm employment has been constantly declining, and the average ability of the farm workers has been steadily decreasing. And yet, during that time, the markets of the Continent have been unable to absorb the excess production of the farms; hundreds of thousands of tons of vegetables and fruit have been left to rot, or have been plowed under. In some areas unmarketable crops have been fed to cattle and brought about a surplus of beef; surplus has been fed to hogs and brought about a surplus of pork; surplus fed to chickens has resulted in a surplus of eggs. Each minor crisis has been surmounted by politics and business by creating another and greater crisis. The food surplus does not disappear -- it merely changes form. Farm production now has reached such vast quantities that any one of several main items are sufficiently large to block the storage facilities of the Continent.

The fabled stupidity of casting pearls before swine has at last been given political validity by the recent announcement from Washington of plans to feed surplus eggs to hogs, to prevent a market glut and to keep prices up.

An equally illuminating example of political inanity occurred in Canada when the quota of bacon deliveries to Britain was reduced. In that case one bureau of Government was seeking to raise the price paid to farmers, so as to guarantee more bacon; the other bureau sought to prevent a rise in prices, regardless of how much bacon went to Britain.

Such examples are merely indicative of a tremendous and dangerous lack of overall planning on this Continent. They make it even more clear that no shade of politics is capable of providing the planning needed in North America, for in politics as in business, price must always be a main consideration.

Probably the outstanding example of the

political approach to a problem was given by Canada's Agriculture Minister Gardiner, when he pointed out that Canada, in 1943, had achieved an over all increase of 48 percent in agricultural production as compared with 1938, and that the people of Canada could not use all the food their country produced; therefore, either 12 million more people would have to come to Canada to consume the additional food produced, or the 40 percent by which Canada had increased her production would have to be exported, less 6 percent by which Canadian consumption has arisen.

Speaking before the National Poultry Conference Jan. 1944

Mr. Gardiner apparently failed to point out that any such 12 million people coming to this country would have to guarantee not to raise any farm products and so threaten Canada again with an abundance.

In the past and at present the people of North America have been taxed to provide money to ship their own products abroad, so as to maintain a scarcity of all commodities here at home. All manner of ideas for continuing this practice are being fed to the people of this Continent in preparation for the post-war period.

However, the people of the U.S. and Canada have come to realize that few countries have anything we need, and that most of our exports are likely to become merely gifts, paid for by us, and used by others.

As was stated by K. M. Cameron, President of the Engineering Institute of Canada: ''Any official committee working on post war rehabilitation plans for Canada will have to reckon on return to peacetime occupation of between two and three million persons.''

In the U.S. probably over 20 million persons will have to be resettled in peacetime pursuits, and any official committee which undertakes this task will have to reckon on more than numbers alone.

TECHNOLOGY

Some of the most important factors which will have to be reckoned with are the technological developments in agriculture which have been held back by the rush of war production. Some of these developments are already in operation in some areas; as war-time restrictions are relaxed they will be spread across the Continent, bringing in their wake an ever growing array of technological equipment to help produce more, in less time, with less toil. Among the more significant of these are:

The cotton picker which, with one operator, can pick as much cotton in a day as 50 to 80 people. Combines which, with one operator, cuts a 12 foot swath at tractor speed; combines that can cut over 20 acres in 9 hours; corn huskers which, with one man, clears two rows at a time as it husks, leaves, silks, and even clears off the dust and mud as the corn moves up the conveyor to the wagon which is pulled along by the same tractor; sugar beet cultivators that enable one man to cultivate over 20 acres per day; sugar beet harvesters which are even now eliminating the drudgery of hand labor; machines that enable one man to do the work of many men in digging and picking potatoes, filling the silo, planting cabbage and many other crops. The once laborious task of haying has become a machine operation, as has milking.

Besides these new machine developments there are other improvements equally important to the future of agriculture on this Continent.

New wonder-working growth producers, quicker maturing varieties of fruits and vegetables, pest and disease resistant strains of grains, improved understanding of cultural processes, etc.

Still another factor of importance to post war agriculture is the possibility of synthetic sugars from wood, coal and other non-agricultural products, synthetic meat from yeast, and a host of other possibilities which all affect the future of farming in North America.

This study began with the question: Will the farmers go back? From the facts examined it is obvious that the answer must be an emphatic NO!

The facts clearly indicate that the hundreds of thousands who left the land for the armed forces and war industries will never be needed again as workers on the farms. The facts examined clearly indicate also that the farmers now on the land will not willingly go back to the individualistic, haphazard farming and market methods of the pre-war years after having experienced the benefits of group use of modern labor-saving equipment and after having enjoyed operation under virtual 'blanket order' methods, without concern about failing markets or dropping prices.

The North American farm is the world's largest war plant, and America's greatest single industry. The farmer is our number one producer of war material--give him the equipment and he can do his job with still less help.

Give the farmer economic security and he will continue to produce an abundance, in less time and with less human toil.

Such is the American Way!

Technology Will Write the Peace!

FIVE years of the most feverish technological expansion in our industrial history have readied us for the grand assault which is now being launched against **Festung Europa.** Millions of men are being thrown into combat and with them such a preponderance of machines and materiel that the forces of the Axis powers can now be brought to their knees in utter defeat.

The Soviet Union (whose output of machines and metal working industry is reported to have risen from 1,100,000,000 rubles in 1913 to 24,700,000,000 in 1937) has blunted the blows of the fascist war machine, and now all the might of North American technology combined with its Eurasian counterpart is coming in for the kill.

The physical manifestation of the fascist ideology (its armed establishment) is faced with a debacle at the hands of a superior array of technology. How will this affect the proponents of the fascist ideology in the civilian establishment? How can we ensure victory against fascism in the peace?

Before attempting to answer these questions, an understanding of the fascist concept is necessary. The lack of information on this all-important point is so widespread that the fighting spirit of our citizenry has been starved for want of a stronger incentive than a mere appeal to adventure, a narrow national patriotism, and the selling point of personal monetary gain. We have been kept well posted on the passing effects of the war and its battles, but there has been such a hush-hush on the discussion of its causes that it becomes a matter of conjecture as to whether it is intended that the public should know.

Fascism Defined

In the years previous to the outbreak of hostilities, Technocracy Inc. defined **fascism** as 'the consolidation of all minor rackets into a major monopoly for the preservation of the status quo.'

Because names were not named and personalities were not indulged in (political fashion), this definition seemed very sweeping in scope and it failed to catch the notice of the vast North American audience. Yet it was fundamental observation. Basically, it was as sound as the tenets of science itself.

The dark clouds of war rolled up, sweeping death and destruction before them. Only at the brink of disaster did the slumbering North American intellect stir to the impending danger.

Technocracy Inc. became more specific. In official Technocracy literature the fascist generalship was described as a 'consolidation of a business oligarchy, an ecclesiastical oligarchy, and a political oligarchy,' and it was observed that in order to secure a victory over the more blatant fascism abroad, it would be necessary to eliminate a near-fascism at home as a complementary adjunct. It was contended that fascism is not confined within national boundaries—that its roots are everywhere.

What is the history, the operating technique, and the purpose of fascism?

Fascism and Scarcity

Fundamentally speaking, **fascism** is not new. It is just a newly-coined word to sugar-coat and to obscure a social disease of yesteryear. The fascist doctrine had its heyday in the age of craft guilds, and thrives today in economics of hand-tool industry. Traditionally, its premise is a condition of scarcity. Thus its hidden social philosophy subscribes (through a maze of subtleties) to the feudal ideas of class and privilege.

When huge blocks of humanity are to be led into serfdom, the job of hoodwinking them must not be too obvious. They must be given the impression that they are on a crusade to alleviate their own lot and to save others. Although this is a blind alley it affords an opportunity to build a following of meek worshipful goose-steppers in the spirit of whole-hearted blind trust. Through centuries of practice, the feudal fascists had learned many tricks in controlling the human herd, and so the 'new order' was launched amidst a galaxy of banners and a display of bombastic bedlam.

The bag of tricks consists of setting up straw grievances, fostering race antagonisms, masquerading behind popular phraseology, and parading a superficial front through super-efficiency in military display. When the social issues are thus thrown into a state of confusion the fascist mind assumes leadership with an appeal to religious racketeers, political pundits, and racial egocentrics on a program that promises a semblance of change for those who want to go places but are not sure just where. Since the gangster fringe of society admires the highly developed predatory types they find it natural to emulate their new antics and a working agreement is evolved.

Fraudulent Language

One of the most subtle weapons of the fascist falange is its fraudulent use of language. The nazi-fascists used this weapon to advantage in the early days of the German campaign. The word 'socialism' had become so popular that it was on the lips of the multitude. Therefore the German fascism became known as 'national socialism' and that is all there was to it. We know what a terminological plagiarism this is when we learn of the operating characteristics of the nazi internal economy. The following quotation from a **Toronto Weekly Star** editorial of August 21, 1943, is enlightening:

'Economists have reported that the nazi economic system is a monster joint stock company organized for the purpose of plundering the world. Goering is one of the biggest shareholders in this company. All the occupied countries are being plundered and economically controlled so that the profits from their business activities flow into the coffers of German financiers and the state treasury.

OK

'The two leading trusts in Germany are the Hermann Goering Works and the I.G. Farbenindustrie. The Goering trust operates largely in Europe, but the tentacles of the I.G.F. reach out into all parts of the world. By controlling patents and the issuing of licenses for the use of machine parts and processes, I.G.F. has obtained control over many industries in and outside Europe. It was the chief instrument in helping the Germans to prepare for this war. Today it is helping them to become self-sufficient in chemical and substitute materials.'

A Terminological Lash!

This does not sound like the 'socialism' advocated by, say, the C.C.F. party in Canada. It is not. It is obviously a phoney. Nevertheless, it is confusing and the Germans fell for it. While Technocracy holds no brief for the mildly socialist program of the C.C.F., contending that this program is inadequate to solve Canada's present problems, we see it as one of the glaring spectacles of the political scene today that the most reactionary elements of our society should hold the lash of this terminological bastardy over the heads of the legitimite—though watered down—socialists.

Meanwhile a near-fascism is being practiced by these same reactionary elements behind the ambiguities of the democratic doctrine and the vagaries of that terminological cliche 'free enterprise.' Without reserve the fascist is among the more devout worshippers at the shrine of the **profit motive.**

In spite of military successes, the outlook for North America would indeed be black if it were not for other factors which impinge upon our future.

Technocracy Inc. points out that the difference between the fascist methodology and the North American way of life is not only a difference in ideology, but basically a difference in the methods of social operation. In all fascist countries, including Germany, physical wealth is produced chiefly by human toil and hand tools, while in America physical wealth is produced chiefly by technological processes using extraneous energy. To this statement can be added the dictum: 'Technology will write the peace!'

To expedite this process, Technocracy Inc. proposes the program of Total Conscription of Men, Machines, Materiel, and Money, with National Service from All and Profits to None. What need remains for such a strategy in view of recent military successes? The answer is instant and unqualified: Never has there been greater urgency for Total Conscription **than now.** Why? Simply because we are now confronted with the most critical moments of the war on fascism—the final onslaught in the field and the possible chaos in demobilization.

Today the forces of the United Nations have taken the offensive. Instead of standing rigid and holding ground our forces in 1944 are rolling forward. The stonewall defences of **Festung Europa** are crumbling before a relentless barrage of sledge-hammer blows. Operations of this scale will require a steady flow of equipment and supplies from our industrial establishments here. Failure to maintain this flow to our fighting men would be nothing short of treason.

Yet what do we find on the home front? Amidst an atmosphere of over-confidence and complacency our pressure groups battle each other; with half an eye on the fighting front and a greedy concern for personal profit and political advantage. Corporations gauge the scope of their war contribution in terms of the balance sheet, while labour thinks of the paycheck instead of production. And added to this confusion is the prospect of noisy general elections.

So precarious has the situation become in the United States that President Roosevelt has felt it incumbent upon him to protest 'the whining demands of selfish pressure groups who seek to feather their nests while young Americans are dying.' As a solution the President proposed a fascistic—conscription of men only—National Service Law, but he did make this observation: 'Although I am convinced that we and our Allies can win without such a measure, I am certain that nothing less than total mobilization of manpower and capital resources will guarantee an early victory.'

This is the situation in the United States. We have no reason to assume that conditions are appreciably different in Canada, for the same factors exist. Glowing profit sheets will not win the war against fascism, neither will the strike tactics of labour.

Total Conscription is urgently needed now, for even if we should happen to win a military decision without it, what of the postwar prospectus? North America would face her future provided with a **fait accompli.** The hazards of foreign attack would be largely eliminated, but North America still has her **technological rendezvous with destiny.** The hazards of demobilization loom portentous. Even now, corporate enterprise, anticipating the problems of demobilization, is becoming squeamish and looking for a soft spot to land, at the expense of all-out production.

From every quarter we hear the chant of the postwar planners. Everybody is planning and everybody is urged to plan—for himself. What we have not yet learned is that an aggregate of individual industrial plans do not add up to a national and a Continental design of operation.

According to **The Nation,** the physical output of industry and agriculture has increased 80 percent in North America since 1939, while the number of persons employed has risen only about 18 percent. This has been accomplished with some 10 to 12 million of our best workers in the Armed Forces, and engaged in dissipating goods in the process of war. What will happen when these millions return and join the 30 or so millions of war workers in peacetime pursuits?

Freight Trains and Bread Lines

In spite of the full page advertisements currently published in the interest of 'private enterprise,' these millions of young Canadians and Americans are not fighting for the preservation of the standards of the depression era. Will they return to freight trains and bread lines? If they decide to man the new machines and produce goods at full capacity for peacetime use, what dollar and cent value will this plethora of production have?

The national organization of the machine tool industry in the United States recently announced that in cooperating with the Government war program, they had destroyed their market for the next 10 years or 15 years and are seeking a refund of all excess-profits taxes to tide them over. Private enterprise does not show much enterprise for the future in this field.

Much of the goods that will be in Government inventories when the war ends, will be usable by consumers. National expansion projects would add to this stockpile. We have the word of D. C. Durland, president of Canadian General Electric, to the effect that only 23 percent of Canada's possible turbine installation is yet accomplished. We now have over 10 million horsepower installed. The St. Lawrence waterways project would develop an extra 3 to 4 million horsepower. Dare we undertake this project as a peacetime employment project under the present controls?

Obviously, North America's rendezvous with destiny is imminent. No amount of individual planning can solve the problems which are posed as a postwar prospectus. Technocracy Inc. has proposed the program of Total Conscription 'for the duration of the war and for six months thereafter.'

This time technology will write the peace! **—C. Warren Lowes**

Postwar Planners Please Note!

OTTAWA, May 31.—The Dominion Bureau of Statistics said Tuesday preliminary figures indicate Canada's chemical industries reached an all-time high in 1943 with production valued at $653,000,000, an increase of 30 percent over 1942 and more than four times greater than the best prewar total. **—Canadian Press**

After the war, soldiers, airmen, and sailors who have ventured their lives for us will never consent to live in conditions that prevailed before the war. **—James Gray Turgeon, M.P.**

Figures of the Bureau of Labor Statistics show that man-days of idleness due to strikes in the United States during the first quarter of 1944, 1,510,000, were about twice those for the same period last year when the figure was 748,564. **—Associated Press**

'Which Kind of Revolution?' *

THIS is a tantalizing book. It has a question as its title and in the early chapters asks many other questions, with a hint that if you will just read through to the end you will have the answers. This is the chief value of the book. For even the asking of questions does something. It stimulates people into being on the watch for the answers and if they do not get them at the time, they will keep on looking.

Herridge has been to a University and has obviously been subjected to much of that process known under the headings of 'improving the mind' and 'spiritual development.' He is also a lawyer and has been a politician. With this combination as an intellectual background it is not surprising that he uses in this volume very few facts and only a trace of the method of factual analysis.

He tricks the subject of his book out in picturesque garb, a strange mixture of mythology, religion, and modern - sounding phraseology picked up from the jargons of the market place, the board room, the revolutionary soap-box, and the pulpit.

He can't bring himself to pass up a chance of declaiming a few resounding intangibles every now and then, such as 'new philosophy,' 'justice,' 'Providence,' 'Divine Commandments.' Yet in his flighty, world-girdling way he does tackle some of the major questions that Canadians are struggling with. The last few chapters of the book might just as well have been left off. But the first two-thirds is worth our time and our money.

Total Use

'When democracy denies its people freedom,' Herridge says, 'it begins to go fascist. English-speaking democracy does deny its people effective freedom. It has failed to give them the full employment of their resources.' For this full employment of resources he uses the short phrase **'Total Use.'** 'This issue of total use is basic in the world today. It divides the past from the future. It marks the end of an era and the beginning of a new one. . . . The new era begins upon a contrary principle and with a new philosophy and purpose. All that the old era stands for stands in the way of automatic transit to the

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**Which Kind of Revolution* by W. D. Herridge. Published by Little, Brown and Company, Boston, Mass. Canadian price: $2.00.

new. That means that this is not a job for evolution. It must be revolution. It will take the power of revolution to end the old era and begin the new . . . . If we welcome it, then the revolution will be bloodless. But if we oppose it, then the revolution will be bloody. . . . Democracy has opposed the revolution. It has resisted the coming of the new era. It has clung to the old way of limited employment of resources. It has persisted in the sin of needless scarcity. It has failed to give its own people the standard of security which science and the centuries of man's toil have now made possible.'

Indictment of Democracy

The second chapter on 'The Failure of Democracy' makes out a strong indictment of the old democratic order. 'In all that Government has done, it has done nothing but bolster up the more apparent weakness of the old order. It has not aimed to build a new order. It has patched up and tinkered with the old one. Tinkering with the old order of democracy is like putting rouge on the face of the dead. . . . We must build a new system which will give us all there is to have. Any limitation upon the capacity of the system is wrong. Anything less than a new system is the old system.'

Then in the discussion of the Second World War he emphasizes again that the economy of 1939 was maintained on avoidable scarcity, and finishes the chapter with another strong accusation: 'Democracy is fighting a war of restoration. We are not trying to build. We are exhuming something which by the laws of science and morality is long since dead.'

The Crime of Scarcity

The chapters continue—a string of arresting titles: Reaction Rules America; Reaction Rules Great Britain; English - speaking Fascism; The Anti-Communist Front; How to Stop the Third World War; and so on. After the fairly sound sizing-up of the condition of English-speaking democracy, with its inclination to fascism, Herridge tends to run into divergencies on various side issues; but he returns to the attack in his chapter on 'English-speaking Fascism,' making much shrewd commentary. He says: 'War has helped us to understand better the crime of needless scarcity and has shown us the way in which to end it. That, for the purposes of war, we have developed an economy which aims at total use of all resources dramatically proclaims the reason why the common man has had to live in scarcity. The reason is because class stupidity and greed have kept him there.' And again: 'Communism was made for Russians. It was not made for us. There are those who say that someday we also shall have our own classless society and our own non-capitalist system. That has yet to be established. But if we should have a new society and system, and if they are to serve us well, they must be the product of our own brains and experience, built to the characteristics of our own people, and specially designed to employ, justly and fully, the natural wealth within our territories.'

The Fascist Front

The chapter on 'The Anti-Communist Front' is astute and stimulating. Herridge begins with: 'In the preceding chapter I have tried to show that democracy's adherence to the doctrine of scarcity involves the denunciation of the democratic processes and the creation of an irresponsible authority which can impose social and economic injustice upon the people. Such an authority or party is essentially fascist. I believe, and I have said, that a fascist front is now forming in the English-speaking world.' He goes on to point out that, 'as the anti-communist front is fascist in concept, naturally it will be fascist in form.' Then later 'When democracy has seized upon fascism as the means of its salvation, nothing can stop the march of humankind to bloody revolution. . . . To stop the third world war we must, as I have said, stop English-speaking democracy from going fascist.'

So far in his book Herridge shows an analytical talent above that of the average politician-out-of-office; and he puts down his findings with a forthrightness that arouses the interest of the enquiring reader who wants to know where the country is going, and with a candor that must alarm and disconcert bank presidents and wealthy senators. So far, so good.

Arm-Chair Intellectualism

But it is when he begins to propose a program of action that the ineffectiveness of the arm-chair intellectual becomes glaringly obvious. Bestriding the world like a colossus he proposes that democracy and communism should regenerate the world according to the doctrine of 'total use.' 'First of all, they would require all nations to proclaim the doctrine of total use and to recast their economies in accordance with the teachings of that doctrine. . . . But each nation should build in the fashion dictated by its own social and political characteristics. The fashion of communism is state initiative. The fashion of English-speaking democracy will be individual initiative buttressed by the state.' He becomes almost ludicrous in his self-assumed pontifical duty of setting a course for the entire civilized world. This Ottawa lawyer takes time out from his other activities to do a good turn for the 20th century world by putting 'English-speaking democracy' on the true course of 'individual initiative buttressed by the state,' even though by his own statement that system has been a dismal failure. It is clearly up to Great Britain, the United States, Australia, Canada, South Africa, and numerous other nations to have a conference and say in an illuminated address to Mr. Herridge: 'Very much obliged!'

He gives himself a fatherly warning—just to prove to himself that he is 'broad-minded': 'We must not begin by saying that we want a capitalist system which will give us total use or a socialist system which will do the trick. We must not demand a system in which there is public ownership of the banks. It should not be our aim to produce a system which, in structure, is like or unlike the old system.' But he immediately disregards the warning and proclaims off-handedly: 'Capitalism suits us best. Therefore, it should be both our duty and our inclination to do our best to make that system work.'

Intellectual Stunt-Flying

Needless to say, the book from here on is completely worthless and fades out in the course of the last few chapters in muddle-headed hopes and wishes and intellectual stunt-flying.

One wouldn't want to read many books like this, but it is interesting to read one, if only as a warning against the futility of haphazard individual effort. No matter how many talented book-writers sit in their studies reading the books of other world-savers and then try their own hands at the game, the people of Canada must realize that we are faced not with a vast abstract historical problem, but rather with one immediate problem, that of winning the war as soon as we can. If we fail in that it doesn't matter how many clever plans we have devised for running the affairs of the entire globe. Then immediately on the heels of the cessation of hostilities will come another problem, that of setting our house in order and giving the men and women who fought for us something **worth living for.** A definite solution of this rehabilitation problem will have to be devised before the war is ended, if we are to avoid a chaotic muddle which will provide an opportunity for North American fascism to come in the back door. Herridge does a poor service to his fellow Canadians in distracting their attention from these problems with his hodge-podge of global alliances and enmities.

The general specifications for the job of achieving victory in the shortest possible time and for really winning the peace have been drawn up: the program of Total Conscription which has been placed in the hands of the legislators of this country. What we need is action on that program **now**, not another dose of intellectual liberal outgiving upon the world. **—W.A. Adam**

Back to Horse and Buggy Days

The Baruch-Hancock report is, on any grounds, an amazing document. It represents, more than anything else, the imposition of a set of pious hopes upon a hard core of reactionary realities. It is Victorian both in its economics and its optimism—and in its gentlemanly refusal to call a problem a problem. Its authors speak glowingly of the 'traditional American spirit of private initiative and resourcefulness' which, they hope, will make of the future 'an adventure in prosperity.' And they let it go largely at that.

Shades of Warren G. Harding, the 1920's, and the Great Depression! Are we once more to leave the problem of high-level employment to the myopic mercies of the American spirit of private initiative? Messrs. Baruch and Hancock suggest that we are. In their view, governmental intervention in the economy should be restricted to the 'limited' construction of public works as a means of 'helping to fill the valleys of depression.'

This is all the more remarkable in the light of their unconcealed admiration for the results of governmental intervention during the war. The war, they suggest, has been a 'crucible' for all of the economic systems of the world. And 'the American system has out-produced the rest.'

This is true. But the system they are here talking about can hardly be said to reflect the 'traditional American spirit of private initiative.' The last time we saw the private-enterprise system in operation was in 1940, when our gross national product was little more than half of what it is today and when nine million persons walked the streets in search of work. In the meantime, we have joined in a colossal economic experiment which has conclusively proved that large-scale governmental intervention can produce full employment and can carry levels of production to previously unimagined heights. That is a lesson which will not be forgotten in the postwar world and which can be forgotten today only at our mortal peril. But it is one that this report has generally managed to overlook.

—J. Donald Kingsley in New Republic

The Permanent War - or 'Homo the Sap'

THE incredible contrast between 1933 and 1943 is surely the most ironic in all economic history. In 1933 our potential economic resources in manpower, raw materials, industrial techniques, and scientific knowledge were approximately the same as those of ten years later, and yet the whole capitalist world lay prostrate in the greatest depression in history. A brief recapitulation of this tragic period is necessary because already current prosperity has blurred the significance and extent of that economic catastrophe. The statistics used relate largely, although not entirely, to the situation as it existed in the United States. The reasons for this choice are twofold: in the first place, the American statistical range is much greater than that of Canada; secondly, I long ago learned that when discussing unpleasant topics, it is less embarrassing, and perhaps somewhat safer, to keep to foreign sources and examples.

Economically speaking, the United States was flat on its back and out cold in 1933. The Dow-Jones index depicts the unprecedented drop in security values. From September 1929, to January 1933, 30 industrial stocks fell from an annual average of $364.9 to $62.7 per share; a group of 20 public utilities dropped from $141.9 to $28.0 per share; 20 railroad stocks skidded from an average of $180.0 to $28.1 per share. Wall Street had taken the most terrible beating in its entire history, and billions of dollars in wealth had gone down the drain. Wholesale prices (1926—100) slid from a 1929 average of 95.3 to a 1933 average of 65.9; employment from 97.5 to 64.6; pay-rolls from 100.5 to 44. The estimates of unemployment in early 1933 varied from 13,000,000 to over 17,000,000, while late in 1934 estimates of the number on relief ranged over 17,000,000. Exports dropped from 5.2 billion dollars in 1929 to 1.6 billions in 1932 while imports slipped from 4.4 to 1.3 billions. Early in 1933 general business activity was less than 60 percent of normal, while steel production fell to only 15 percent of capacity. Farm prices (1910-14 average equals 100) dwindled from 138 in 1929 to 63 in 1933 while the gross

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This delicious bit of economic satire is a reprint of the first 16½ pages of the booklet **The Permanent War—or Homo the Sap** by Lorne T. Morgan, M.A., Ph.D., Associate Professor of Political Economy, University of Toronto.

income of farmers fell 57 percent. In 1932 alone over 1,400 American banks failed. A moratorium on banking was proclaimed on March 5—the richest nation in the world was without a single operating bank. So much for a brief statistical survey of the wreckage.

The Social Cost

The **social** cost in terms of broken homes and health, divorces, insanity, suicides, murders, and a veritable plague of minor crimes will never be known, for it cannot be measured. It must have been enormous. The far-famed land of the double garage had become that of the Hooverville. The Great Engineer, as one wag sourly put it, had proved his claim to the name by ditching and draining the world's mightiest country in the incredibly short space of four years. (Ex-President Hoover has also been described as a man who made his name through feeding foreigners, who lost it through starving Americans, and who would like to get it back again through feeding more foreigners.) Let us draw the blind down on 1933. No blacker period exists in American Economic History. And the American scene was more or less duplicated many fold throughout the capitalist world. It was a period of social horrors resulting from economic forces culminating in the wild spree of 1929. The ensuing **delirium tremens** lasted in one form or another until 1939 and the outbreak of the Second World War.

War and the Present System

The economic scene of 1943 is as different from that of 1933 as white from black. In general, the production figures of the present year make even those of 1929 look like the proceeds of a professorial penny ante game. Every single unrestricted industrial enterprise is going all out. The rate of expansion has been incredible and the end is nowhere in sight. A brief statistical survey will drive home to the reader the full effect of the current war upon the economic system we know today. Since the thesis here advanced is that **a permanent war is necesssary to the successful operation of our present economic system,** we must consider the results of war on that economy as fully as possible.

War and National Income

Official figures of the national income are perhaps the most striking indication of what that effect has been. In 1929, the national income of the United States was 83.3 billion dollars. By 1932 it had shrunk to approximately 40 billions, or been cut in half; and in 1939 it stood at only 70.8 billions. By 1942, however, it had reached 119.8 billion and the official estimate for 1943 is the astronomical figure of 140 billions. These figures are in terms of 1935-39 dollars, but even allowing for increased prices the gain is simply astounding. An official breakdown of the 1939 and 1942 figures shows that the prosperity indicated affected all classes in American society. Total compensation for all employees increased from 48.3 in 1939 to 83 billions in 1942; entrepreneural income and net rents jumped from 13.3 to 22 billions; interest and dividends climbed from 8.8 to 10 billions; and corporate savings expanded from 500 millions to 3 billions. Industrial production showed a similar trend for, taking 1935-39 as 100, manufacturing by the end of 1942 had doubled, while the production of durable goods had nearly trebled—and economists are agreed that activity in the durable goods industries spells prosperity in general.

War and Employment

Estimates of the unemployed in 1933 varied between 13 and 17 millions. After years of herculean effort on the part of the Government, they still averaged 8.1 millions per month in 1940 and 5.6 millions in 1941. But by the end of 1942 they had shrunk to 1.5 millions. This is practically zero, for United States authorities estimate that there will always be about 1,000,000 temporarily out of work through changing from one job to another, and there probably are 500,000 unemployables in the country. In other words, the greatest single economic bugaboo that ever plagued the American people practically vanished **within 13 months** of their being booted into war. In 1933, an applicant had to be under 40 and a track star to get a job. Today the newspapers are full of pictures of grandpappies and even their consorts, 'doing their bit' by working as many hours as they are able to stand. The aged, the maimed, the halt, and the blind trot regularly to the factory. Girls, whose job in the Starving Thirties was baby-sitting at about a dime an hour, now make wages in munitions factories beyond the dreams of even their fathers in the earlier period. The shortage of even totally unskilled labour, in Canada at least, was made only too apparent when prairie farmers actually asked the Government to ship them university students as temporary farm hands! That could only have meant that the very bottom of the manpower barrel had been scraped thoroughly. Returning to the American scene, there were but 1,930,000 women employed in manufacturing industries in 1920. On July 7, 1943, President Roosevelt announced that 16,000,000 women were at work in the United States, of whom over 2,000,000 were employed directly on munitions. That this full employment is possible only during the war is emphasized by the estimate of David C. Prince, Vice-President of General Electric, that when peace comes once again 20,000,000 persons will be released from war jobs in the United States and another 7,000,000 from the Armed Forces. When, and if, that tragedy is allowed to happen the repercussions will make 1933 look like a holiday.

War and Farm Prosperity

In a similar fashion, war hurled prosperity at the American farmer. The prices of farm products and government payments determine farm income in the United States. The index (base 1909-14 equals 100) of prices received by the American farmer stood in 1932 at 65. In 1939, the last prewar year, it stood at 93. On May 15, 1943, that index had jumped to 187. As a result, farm income boomed skywards. Cash receipts, which had amounted to **only 4.7 billion dollars in 1932**, and which, after years of unprecedented government aid to the farmer, had finally reached 8.7 billions in 1939, now, under the impact of war, soared to the magnificent total of 16.1 billions in 1942—the highest figure ever reached in American history.

During the Starving Thirties, the agricultural programme of the New Deal, based as it was on curtailment of production, involved ploughing under everything except farmers—the one course which would really have relieved the situation. That is the story of peace. Today, happily at war, the United States has reversed this arsyvarsy procedure and is purposely expanding her agricultural productivity at the fastest rate in her history. Quoth Chester Davis, recently resigned United States Food Administrator: 'The Administration will shoot at (how apropos!) 70,000,000 acres in wheat for 1944, as compared with 52,000,000 acres this year (1943). Also it will go after comparable increases in all important crops. They will try to get into cultivation practically all land that can be safely cropped, if the farmers can get the necessary additional equipment.' Parity, which called for restoring to the farmers the purchasingpower of 1909-14, remained an unrealized dream of the farmers in the thirties. Today, they curse it as a millstone around their necks. Hell-bent for higher prices regardless of consequences, they have taken the bit in their teeth and are away to the races. Their attitude and demands constitute the single greatest threat to price control in the United States today. Driven frantic by the combination of long years of suffering and the sudden unexpected chance of real profits, they may yet shoot that control to pieces and make a sieve of the American war effort. The conclusion is inescapable: just as war effectually ended the labour problem, so it has solved the farm problem of the United States—something that the 'unconstitutional' efforts of the most revolutionary government in American history were unable to do in time of peace. Let us not forget it.

War and Business Profits

A momentary glance at corporation profits immediately discloses the stimulating effect of war upon business generally. Corporation profits before taxes amounted to 9.2 billion dollars in the golden year of 1929. By 1932, profits had not only completely disappeared, but corporations in the United States ran into the red to the tune of 5.2 billions. By 1939, the last prewar year, corporation profits had climbed back to 5.3 billions. Then Hitler performed a miracle by plunging the world into war, and during the year 1942 American corporations piled up 19.8 billions in profits before taxes. Even after the greatly increased taxes of 1942 were paid, it proved the most profitable year to American business since 1929. This simply shows that as far as business is concerned, the nation can carry on a first-class war and still reap a handsome profit. Of course. if the war were smaller, and operated scientifically in conjunction with the business index, it would be much more profitable. But we shall come to that later. Let us conclude the evidence before rendering a decision.

(To be concluded next issue)

Let war continue, but on a scientific and modified scale, and we shall see material advances which will make the predictions of the Technocrats look like a Red rouble in the eyes of a Wall Street Banker the day before Pearl Harbor.
—Lorne T. Morgan

TECHNOCRACY

WHAT?

Technocracy is the only North American social movement with a North American program which has become widespread on this Continent. It has no affiliation with any other organization, group, or association either in North America or elsewhere.

The basic unit of Technocracy is the chartered Section consisting of a minimum of 25 members and running up to several hundred.

It is not a commercial organization or a political party; it has no financial subsidy or endowment and has no debts. Technocracy is supported entirely by the dues and donations of its own members. The widespread activities of Technocracy are performed voluntarily; no royalties, commissions, or bonuses are paid, and only a small full-time staff receives subsistence allowances. The annual dues are $6.00 which are paid by the member to his local Section.

Members wear the chromium and vermilion insignia of Technocracy—the Monad, an ancient generic symbol signifying balance.

WHERE?

There are units and members of Technocracy in almost every State in the U. S. and in all provinces in Canada, and in addition there are members in Alaska, Hawaii, Panama, Puerto Rico, and in numerous other places with the Armed Forces.

Members of Technocracy are glad to travel many miles to discuss Technocracy's Victory Program with any interested people and Continental Headquarters will be pleased to inform anyone of the location of the nearest Technocracy unit.

WHEN?

Technocracy originated in the winter of 1918-1919 when Howard Scott formed a group of scientists, engineers, and economists that became known in 1920 as the Technical Alliance—a research organization. In 1930 it was incorporated under the laws of the State of New York as a non-profit, non-political, non-sectarian membership organization. In 1934, Howard Scott, Director-in-Chief, made his first Continental lecture tour which laid the foundations of the present nation-wide membership organization. Since 1934 Technocracy has grown steadily without any spectacular spurts, revivals, collapses, or rebirths. This is in spite of the fact that the press has generally 'held the lid' on Technocracy, until early in 1942 when it made the tremendous 'discovery' that Technocracy had been reborn suddenly full-fledged with all its members, headquarters, etc., in full swing!

WHO?

Technocracy was built in North America by North Americans. It is composed of North American citizens of all walks of life. Technocracy's membership is a composite of all the occupations, economic levels, races, and religions which make up this Continent. Membership is open only to North American citizens. Aliens, Asiatics, and politicians are not eligible. (By politicians is meant those holding elective political office or active office in any political party.)

Doctor, lawyer, storekeeper, farmer, mechanic, teacher, preacher, or housewife—as long as you are a patriotic North American—you are welcome in Technocracy.

FRONT COVER

The construction of the 1523-mile Alaska Highway in record time was made possible only by such sturdy, useful equipment as the Carry All, pictured on the front cover. These machines facilitated moving large quantities of earth; for instance, in lowering the grade on a hill they carried the earth from the top as it was cut down to the bottom to build it up, thus speeding the work tremendously.

(National Film Board Photo)

TOTAL CONSCRIPTION

Technocracy's Total Conscription Program serves two purposes. It is a war emergency measure and it is a design of operations through which we can make an orderly transition from war to peace.

Therefore, the Total Conscription Program is more far-reaching and vitally important than just a superficial examination would indicate. Not only is it the solution to our current social paradoxes (which are direct and unavoidable consequences of trying to fight a total war with the methods of business-as-usual), but it provides the effective mechanism for stabilization in the postwar period. When hostilities cease we shall thus have an opportunity, free from economic and political confusion, to determine the type of social mechanism which must then be established to meet the requirements of North America and its people.

Total Conscription (of itself) is definitely not a social reform program. It is the synthesis of the direction that North America will take as the war continues. It indicates what the people of this country and this Continent must do if they are to prosecute the war to a successful conclusion with the least possible wastage of our manpower and natural resources, and win the peace.

With the advent of Total Conscription this nation as a whole will utilize all its Men, Machines, Materiel, and Money. Production will be conducted according to the requirements of the war and not in accordance with the privileges of business, politics, or other pressure groups.

There is, of course, an alternative between us and Total Conscription. That alternative is fascism.

It is high time that the people of this Continent indicated which side they are on. Are you on our side? Are you on the side of science, of progress, of victory? Or are you on the side of fascism, retrogression, and defeat?

If you are with us, how about showing it? How about doing a little thinking with your head right now? If you don't, you will have to learn the hard way—with your stomach!

(Section Stamp)

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